

DRAFT Personal Wireless Service Zoning Bylaw
Version 1.0—June 29, 2015

Delete Commercial Communication Structures from Section 2.0 Definitions.
Add a new definition of “Personal Wireless Service Facilities” as follows:

Personal Wireless Service Facility (PWSF)—All equipment, including Repeaters, with which a Personal Wireless Service Provider broadcasts and receives the radio-frequency waves which carry their services, and all equipment, appurtenances and structures, including towers, relating thereto.

Revise Section 5.3.1 and Section 5.3.2 Table of Uses to allow PWSFs by Special Permit through the CPDC in every zoning district and delete Commercial Communications Structures in Section 5.3.1 and Section 5.3.2 Table of Uses.

Delete in its entirety Section 5.6.3 Commercial Communications Structures and replace with new Section 5.6.3 Personal Wireless Service Facilities, as follows:

Personal Wireless Service Facilities (PWSFs)

5.6.3. Applicability. No PWSF shall be erected, installed or modified except upon issuance of a special permit in compliance with the provisions of this bylaw, whether the PWSF is considered a principal use or an accessory use.

5.6.3.1. Preferences—Siting and Facility Type.

A. PWSF Siting. A PWSF may be permitted within any district by Special Permit, subject to the purposes and standards established in this bylaw. The following list of allowable PWSF Locations is presented in order of preference.

1. First Preference: A site located entirely within an Interstate Highway right-of-way.
2. Second Preference: A site located entirely within an Industrial zoning district.
3. Third Preference: A site located entirely within a Business (Bus A and Bus C) zoning district.
4. Fourth Preference: A site located within the Residential S-15, S-20, S-40, A-40, A-80 or within the Business B zoning districts.

B. PWSF Installation Types: The following list of PWSF Installation Types is presented in order of preference.

1. First Preference: The following PWSF Installation Types are of equal preference to one another:

- a. PWSF Collocation. A new PWSF may Collocate on any existing PWSF to the extent that such Collocation is found by the CPDC to be consistent with the purposes and standards established in this bylaw.
- b. PWSF on Existing Electrical Utility Infrastructure. A PWSF may Collocate on existing electrical utility infrastructure such as utility poles or streetlights using unobtrusive architectures such as Distributed Antenna Systems (DAS). With respect to the use of utility poles, Collocation on existing electrical utility poles (and replacements thereof) is preferred above the installation of new electrical utility poles in public/private ways. In neighborhoods with underground electrical utilities, pole-mounted PWSF on existing electrical utility infrastructure are discouraged in favor of less visually obtrusive alternatives, such as placing a small antenna installation on existing electrical utility poles on a nearby street.
- c. Other Implementations. A PWSF may be located using innovative alternatives that are in keeping with the purpose and intent of this Bylaw and that may become available after the adoption of this Bylaw.

2. Second Preference: PWSF Site Sharing. A new PWSF may share the same parcel with existing PWSFs, to the extent that such site-sharing is found by the CPDC to be consistent with the purposes and standards established in this bylaw.

3. Third Preference: A new PWSF installation on any existing structure, to the extent that such installation is found by the CPDC to be consistent with the purposes and standards established in this bylaw.

3. Fourth Preference: PWSF involving a new antenna tower. PWSFs which require the construction of a new antenna tower are least on the order of preference.

4. Waiver of Preferences. The CPDC may waive the preference orders designated for siting and types of PWSF pursuant to Section 5.6.3.1.A upon a finding that the siting at a location of lesser preference, or the installation of a PWSF type of lesser preference, would achieve a result more consistent with the purposes and standards established in this bylaw.

5.6.3.2. General Special Permit Requirements.

A. Use. PWSFs shall only be employed for the purpose of delivering wireless services to subscriber devices or supporting public safety communications, and shall not be used for storage, office, manufacturing, repair, or other activities unless separately permitted for such other activities.

B. Demonstration of need.

1. Need for service. The applicant must demonstrate the service objectives in the Town of Reading that the proposed PWSF will address in whole or in part. Such demonstration shall include:

a. Substantial written evidence including technical documentation demonstrating that there is a substantial deficiency in the applicant's provision of service to the Town of Reading which fails to satisfy the service objectives;

b. detailed information about all existing and pending PWSFs regardless of ownership, control or the jurisdiction in which they are located, and associated coverage maps;

c. information about terrain, vegetation and land use within the proposed coverage area;

d. estimates with supporting documentation of the number of mobile and stationary subscribers affected by the claimed substantial deficiency;

e. network performance factors; and

f. other information relevant to the Applicant's service objectives, or as may be required by the CPDC.

2. Need for location. The applicant must provide substantial written evidence including clear documentation showing how the improved service to the Town of Reading that applicant seeks could not be provided by utilizing one or more alternative locations of higher preference as described in Section 5.6.3.1.A or, alternatively, how the proposed PWSF achieves a better result as described in Section 5.6.3.4.C.

3. Availability of alternatives. The CPDC, at its discretion, may require the applicant to consider specific potential alternatives at any level of the hierarchy in Section 5.6.3.1.A, if the CPDC determines that such locations may better achieve the purposes established in this bylaw.

C. Visual Guidelines. The construction, erection, installation and/or placement of all PWSF shall be reviewed by the CPDC within the public hearing process based on the following visual guidelines:

1. Concealment. To the maximum extent practicable, PWSFs shall conceal equipment, cables, and antennas within architectural surfaces that are ordinary and consistent with the context of the PWSF within the Town of Reading environs, such as steeples, concealed-antenna monopoles, flagpoles, smokestacks, faux chimneys and cupolas.

2. Screening, Camouflage and Landscaping. Wherever possible, PWSF shall be sited so as to minimize the visibility of such devices from adjacent property and shall be suitably screened from abutters and residential neighborhoods. Where elements of a PWSF will be visible to residential parcels and public or private ways, PWSFs shall employ screening and/or camouflage methods that are consistent with the context of the surrounding area such as fencing, vegetation, and paint color or patterns to match underlying surfaces in order to mitigate any undesirable visual bulk and distraction. Installation of free-standing PWSF shall minimize the removal of trees and other existing vegetation.

3. Scale. The visual characteristics of a PWSF shall be minimized with respect to being unreasonable in scale, such as a dominant or looming visual experience, disproportion to the site and its surroundings, or undesirable shadowing impacts.

4. Color. Free-standing, wall mounted and roof-mounted devices may be required to be painted or otherwise colored or finished in a manner which aesthetically minimizes the visual bulk of the devices to the surrounding landscape or on the building or structure to which they are attached.

5. Signs. There shall be no advertising permitted on or in the vicinity of PWSF. There shall be a sign not exceeding four square feet in area at each PWSF which shall display a phone number where the responsible party for the maintenance of the PWSF may be reached on a 24 hour basis.

6. Lighting. Outdoor lighting of PWSFs shall be limited to that which is necessary for security and temporary maintenance at the discretion of the CPDC. PWSFs that are required to be marked and lighted for air navigation safety are discouraged.

7. Maintenance. The visual characteristics of a PWSF shall be maintained, repaired and replaced as necessary and as an ongoing condition of compliance to retain the characteristics approved by issuance of a special permit.

8. Prohibitions. The following are specifically prohibited:

- a. Lattice style antenna towers and facilities requiring three or more legs and/or guy wires for support; and
- b. Fences utilizing razor wire or barbed wire or similar wire types.

D. Height:

1. Height General

Regardless of the type of mount, a PWSF shall be no higher than ten feet above the average height of buildings within 300 feet of the proposed facility. In addition, the height of a PWSF shall not exceed by more than 10 feet the height limitations of the zoning district in which the facility is proposed to be located, unless the facility is completely camouflaged such as within a flagpole, steeple, chimney, or similar structure. Wireless service facilities may locate on a building that is legally non-conforming with respect to height, provided that the facilities do not project above the existing building height.

2. Height, Ground-Mounted Facilities

Ground-mounted wireless service facilities shall not project higher than ten feet above the average building height or, if there are no buildings within 300 feet, these facilities shall not project higher than ten feet above the average tree canopy height, measured from average grade level. If there are no buildings within 300 feet of the proposed site of the facility, all ground-mounted wireless service facilities shall be surrounded by dense tree growth to screen views of the facility in all directions. These trees may exist or may be planted on site.

3. Height, Side-and Roof-Mounted Facilities

Side-and roof-mounted wireless service facilities shall not project more than ten (10) feet above the height of an existing building or structure nor project more than ten (10) feet above the height limit of the zoning district within which the facility is located.

4. Height, Preexistent Structures (Utility)

New antennas located on any of the following structures existing on the effective date of this bylaw shall be exempt from the height restrictions of this bylaw provided that there is no increase in height of the existing structure as a result of the installation of a wireless

service facility: Water towers, guyed towers, lattice towers, fire towers and monopoles.

E. Setbacks:

All wireless service facilities and their equipment shelters shall comply with the building setback provisions of the zoning district in which the facility is located. In addition, the following setbacks shall be observed.

1. In order to ensure public safety, the minimum distance from the base of any ground-mounted wireless service facility to any property line, shall be 1.5 times the height of the facility/mount, including any antennas or other appurtenances. This set back is considered the “fall zone”.
2. In the event that a preexistent building or structure is proposed as a mount for a wireless service facility, the setback provisions of the zoning district shall apply. In the case of the preexistent non-conforming structures, wireless service facilities and their equipment shelters shall not increase any non-conformity.
3. Additional Required Setbacks. In all districts, PWSFs shall be placed no closer than 3 times the height of the Antenna above grade to an existing school, Child Care Facility, Nursing or Convalescent Home, or an Assisted Living Facility.

5.6.3.3. Application Procedures.

A. Preliminary Review. Applicants are strongly encouraged to contact the Town Planner to initiate a dialogue well before final site selection and detailed application development. The Preliminary Review is intended to:

1. Provide the Applicant with the opportunity to discuss and clarify Zoning Bylaws and CPDC Site Plan Review Guidelines and Regulations (adopted by the CPDC pursuant to Section 4.6.1.2) relevant to the Applicant’s prospective PWSF proposal; and
2. To review general concepts related to the PWSF and alternative means of implementation to determine the CPDC’s preferences.

B. Special Permit and Site Plan Approval. No PWSF, whether itself a principal use of a lot or as an accessory use to a communication facility, shall be constructed without a Special Permit having been granted by the CPDC.

The CPDC may grant a Special Permit in accordance with the provisions of this Section and Section 4.4. Nothing in this section is intended to exempt PWSF from the requirement to receive Site Plan Approval pursuant to Section 4.6.

C. Consultant Review. When considering an application for a PWSF, the CPDC may determine the need for the assistance of a consultant technical expert in matters involving the placement, construction and modification of PWSFs, under the Zoning Bylaw and the Telecommunications Act of 1996, at the Applicant's expense pursuant to G.L. c. 44 s. 53G. To make the most productive use of the limited time authorized by the Federal Communications Commission (FCC) to hear the application, the CPDC may at its discretion engage a consultant immediately upon receipt of an application.

5.6.3.4. Decision.

A. Required Findings. To approve a Special Permit for a PWSF, the CPDC must make the following findings:

1. That the Applicant or co-Applicant has:
 - a. demonstrated that it is a Personal Wireless Services provider in the Town of Reading area, and has sufficient ownership or leasehold interest in the proposed site to construct the PWSF;
 - b. provided written assent to the Town that the Applicant will allow Site-Sharing, to the extent reasonably practicable and that is appropriate for the site and surroundings, in a reasonable and nondiscriminatory manner; and
 - c. demonstrated that the construction, operation and maintenance of the proposed PWSF are consistent with applicable environmental regulations including, but not limited to, National Environmental Policy Act (NEPA) criteria.
2. That the proposed PWSF (with conditions, if applicable):
 - a. is part of the orderly development of PWSFs in the Town of Reading, and will result in a substantial improvement in the provision of Personal Wireless Service in the Town of Reading;
 - b. is compatible with the Town of Reading's character and is designed and screened in a manner that is sensitive to the surrounding neighborhood as well as the community at large; protects adjacent properties from unreasonable risks of PWSFs, to the extent permitted by law, including without

limitation excessive noise levels, falling objects, fuel spills, and attractive nuisance;

c. if the proposed PWSF will Site-Share with an existing PWSF(s), that such Site Sharing is found by the CPDC to be consistent with the purposes established in this bylaw;

d. conforms with the PWSF Location and PWSF Installation preferences of Section 5.6.3.1.B to the extent necessary to conform with the purposes established in this bylaw;

e. ensures that all radio frequency (RF) emissions shall comply with the FCC requirements codified in 47 CFR § 1.1307 et seq as further interpreted by FCC Office of Engineering and Technology Bulletin 65, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Magnetic Fields, or any successor regulation or bulletin, as same may be amended from time to time.

f. if proposed as a new antenna tower, the Applicant has documented that no combination of one or more alternative Collocations and/or Site Sharing can substantially satisfy the Applicant's coverage objectives; and present a substantially less detrimental impact on the Town of Reading.

g. satisfies the Purposes established by the Zoning Bylaw and, without limitation, the specific requirements and guidelines established in this bylaw; and

h. if applicable, that the existing vegetation will be preserved or improved; and

i. where applicable, that disturbance of the existing topography has been minimized or that proposed manipulation of vegetation and disturbance of topography results in a lesser visual impact.

.B. Form of Decision. The CPDC shall act on a Special Permit request for the placement of a PWSF in accordance with G.L. c. 40A, §9 and may approve, approve with conditions, or deny an application. The Decision of the CPDC shall be timely, in writing and based upon substantial evidence in the written record.

1. Approval. Any approved Special Permit shall authorize specific PWS provider(s) and specific wireless service(s) to be operated by the Applicant(s) at the Antenna height(s) or positions specified in the application or approval document.

2. Approval with Conditions. The CPDC may impose conditions of approval as necessary to ensure that the purposes of this bylaw are achieved. For any condition that the CPDC establishes with reporting

or monitoring requirements, including without limitation noise or radio frequency emissions, the CPDC shall seek the advice of an expert in the relevant field pursuant to Section 5.6.3.3.C to identify the least burdensome protocol that is consistent with a legitimate public purpose identified by the CPDC.

3. Denial. Any denial shall be in writing and supported by substantial evidence contained in the record as required by the Telecommunications Act of 1996.

4. Reconsideration pursuant to Telecommunications Act. If the CPDC fails to find in favor of all elements of Section 5.6.3.4.A, the CPDC shall reconsider the proposed PWSF in the context of the Telecommunications Act of 1996. To approve the Special Permit under this section, the CPDC must make the following findings:

- a. That a significant gap exists in the coverage area of the proposed PWSF, which significant gap is not necessarily equivalent to the lack of the Applicant's stated coverage objectives;
- b. That there are no viable alternatives involving one or more PWSFs to serve the significant gap;
- c. That not granting a Special Permit for the proposed PWSF (including conditions, if any) would effectively prohibit the provision of personal wireless services;

C. Waivers. The CPDC may at its discretion authorize waivers in the Special Permit Approval with respect to the orders of preference in Section 5.6.3.1A and 5.6.3.1.B, and any dimensional or other requirements of Section 6.6.3.2.D and 5.6.3.2.E upon a finding that such waiver will achieve better results consistent with the purposes and standards established in this Section 5.6.3.

5.6.3.5. Removal of abandoned antenna towers and PWSFs. Any PWSF antenna tower, PWSF Communications Device, or PWSF that is not commercially operated for a continuous period of twelve (12) months shall be considered abandoned, and the owner of such antenna tower, PWSF Communications Device, or PWSF shall remove same within ninety (90) days of receipt of notice from the Town notifying the owner of such abandonment. If such tower or facility is not removed within said ninety (90) days, the Town may cause such tower or facility to be removed at the owner's expense. If there are two or more users of a single tower, the height may be reduced to that required by the remaining user(s). If the permit holder for the tower ceases operation, the remaining users may be required to apply for a new Special Permit.